



General

Guideline Title

Best evidence statement (BEST). Skin to skin care in a level III-IV NICU.

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BEST). Skin to skin care in a level III-IV NICU. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2013 Apr 30. 6 p. [6 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The strength of the recommendation (strongly recommended, recommended, or no recommendation) and the quality of the evidence (1a to 5b) are defined at the end of the "Major Recommendations" field.

1. There is insufficient evidence and lack of consensus to make a recommendation on the use of skin to skin care (SSC) to decrease the number of days on non-invasive respiratory support or number of days on ventilation in a Level III-IV neonatal intensive care unit (NICU) in a high income country.
2. There is insufficient evidence and lack of consensus to make a recommendation on the use of SSC to decrease infection in a Level III-IV NICU in a high income country.
3. It is not recommended that SSC be used to reduce mortality or length of stay in a Level III-IV NICU in a high income country (Conde-Agudelo, Belizán, & Diaz-Rossello, 2011 [1a]; Moore et al., 2012 [1a]).

Note: Randomized control trials in high income countries reported lower mean duration in hours/day of intermittent SSC (Conde-Agudelo, Belizán, & Diaz-Rossello, 2011 [1a]).

Definitions:

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain

Quality Level	Definition
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

†a = good quality study; b = lesser quality study

Table of Language and Definitions for Recommendation Strength

Language for Strength	Definition
It is strongly recommended that... It is strongly recommended that... not...	There is consensus that benefits clearly outweigh risks and burdens (or visa-versa for negative recommendations).
It is recommended that... It is recommended that... not...	There is consensus that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation...	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Diseases and conditions requiring care in a Level III-IV neonatal intensive care unit (NICU)

Guideline Category

Management

Prevention

Treatment

Clinical Specialty

Family Practice

Obstetrics and Gynecology

Pediatrics

Preventive Medicine

Intended Users

Advanced Practice Nurses

Hospitals

Nurses

Physician Assistants

Physicians

Respiratory Care Practitioners

Guideline Objective(s)

To evaluate, among neonates in a Level III-IV neonatal intensive care unit (NICU), if receiving skin to skin care (SSC) compared to those not receiving SSC improves outcomes of decreased mortality, infection, length of hospital stay days on non-invasive respiratory support, or days on a ventilator

Target Population

Neonates in a Level III-IV neonatal intensive care unit (NICU) in a high income country

Note: These guidelines do not apply to the following populations:

- Neonates in the low acuity setting (such as a newborn nursery)
- Neonates in a resource limited setting (low income country)

Interventions and Practices Considered

Skin to skin care (SSC)

Major Outcomes Considered

- Mortality
- Infection
- Length of hospital stay
- Days on non-invasive respiratory support
- Days on a ventilator

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Search Strategy

Databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Library, Medline

Search Terms: Skin to Skin Care, Kangaroo Care, Kangaroo Mother Care

Filters: 1999 to 2012, Human, English

Search Dates: October 16, 2012

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

†a = good quality study; b = lesser quality study

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Table of Language and Definitions for Recommendation Strength

Language for Strength	Definition
It is strongly recommended that... It is strongly recommended that... not...	There is consensus that benefits clearly outweigh risks and burdens (or visa-versa for negative recommendations).
It is recommended that... It is recommended that... not...	There is consensus that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation...	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

This Best Evidence Statement has been reviewed against quality criteria by two independent reviewers from the Cincinnati Children's Hospital Medical Center (CCHMC) Evidence Collaboration.

Evidence Supporting the Recommendations

References Supporting the Recommendations

Conde-Agudelo A, Belizan JM, Diaz-Rossello J. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. Cochrane Database Syst Rev. 2011;(3):CD002771. [PubMed](#)

Moore ER, Anderson GC, Bergman N, Dowswell T. Early skin-to-skin contact for mothers and their healthy newborn infants. Cochrane Database Syst Rev. 2012;5:CD003519. [PubMed](#)

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for one recommendation (see the "Major Recommendations" field). For two outcomes, there was insufficient evidence to make a recommendation.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate use of skin to skin care (SSC) in a level III-IV neonatal intensive care unit (NICU)

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

Implementation of the Guideline

Description of Implementation Strategy

Applicability Issues

Frequently, in the Level III-IV neonatal intensive care unit (NICU) environment, patients are unstable, admitted after, or stay beyond the optimal period for skin to skin care (SSC).

Further research is needed concerning effectiveness and safety of early onset SSC are in unstabilized low birth weight infants and long term neurodevelopmental outcomes.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2013 Apr 30

Guideline Developer(s)

Cincinnati Children's Hospital Medical Center - Hospital/Medical Center

Source(s) of Funding

No external funding was received for development of this Best Evidence Statement (BEST).

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

Team Leader/Author: Michael Moyer BSN, RNC-NIC

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Financial Disclosures/Conflicts of Interest

Conflicts of interest were declared for each team member. No financial conflicts of interest were found.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the [Cincinnati Children's Hospital Medical Center Web site](#) .

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

Availability of Companion Documents

The following are available:

- Judging the strength of a recommendation. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [Cincinnati Children's Hospital Medical Center \(CCHMC\) Web site](#) .
- Grading a body of evidence to answer a clinical question. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [CCHMC Web site](#) .
- Table of evidence levels. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [CCHMC Web site](#) .

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Patient Resources

None available

NGC Status

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